

Reclassification of CPR Aids

Jerry Potts, PhD Laerdal Medical September 11, 2013









After several years of widespread use and refinement of design, CPR Aid technology is quite mature and its value well proven.



AHA Consensus Statement

CPR Quality: Improving Cardiac Resuscitation Outcomes Both Inside and Outside the Hospital

A Consensus Statement From the American Heart Association

Endorsed by the American College of Emergency Physicians

Peter A. Meaney, MD, MPH, Chair; Bentley J. Bobrow, MD, FAHA, Co-Chair; Mary E. Mancini, RN, PhD, NE-BC, FAHA; Jim Christenson, MD; Allan R. de Caen, MD; Earhan Phanii MD, MSa, FAHA; Paniamin S, Aballa MD, MBhill FAHA;

"Without CPR measurement and subsequent understanding of CPR performance, improvement and optimized performance cannot occur. Providing CPR without monitoring performance can be likened to flying an airplane without an altimeter"



Laerdal proposes that *all* CPR Aids, not just those that do not provide feedback, should be *510(k)* exempt.



CPR Aids: Risks to health

Risks to health identified by FDA:

- Adverse skin reactions due to device material
- Suboptimal CPR due to improper feedback



Suboptimal CPR

- MDR reports for past 12 years: no reports of inaccurate feedback.
- The theoretical risk of providing inaccurate feedback should be weighed against the established fact of sub-optimal CPR:
 - 60% of compressions performed by professional rescuers do not meet AHA guidelines for compression depth.

CPR Aids provide a tremendous opportunity to improve the quality of CPR.



Because CPR Aids have a *low risk profile*, it is *unnecessary* for FDA to allocate resources for premarket review of these devices, especially if CPR Aids are required to provide feedback *in accordance with AHA guidelines*.



The presence or absence of software is immaterial to whether 510(k) is needed.

- Software in CPR Aids is a mature, relatively simple technology.
- Even non-software devices could fail and lead to suboptimal CPR.
- All CPR Aids are simple devices, whether controlled by software or not.
- The criteria to justify 510(k) exemption for CPR Aids without software apply equally well to those with software.



Conclusion

CPR Aids do not need 510(k) review, regardless of:

- Whether or not they have software.
- Whether or not they provide real-time feedback.
- Whether their users are highly trained professionals or not.